

PATENT
USN. 09/894,233

Docket No. 1232-4242US3

Amendments to the Claims:

Claims 1-46 are pending and have been allowed. By this Amendment, claims 11 and 12 are amended and claims 35-46 are canceled without prejudice or disclaimer. The following listing of claims should replace all previous claim listings.

1. (Previously Presented) A camera apparatus control system comprising:

a camera apparatus capable of being operated via a network in operation which is at least one of panning, tilting and zooming of the camera apparatus; and

a manager, arranged to manage the operation on the basis of first and second management information stored in a table where the first management information indicates limitation information relating to the operation for each user and the second management information indicates whether or not the camera apparatus is operated by a user,

wherein said manager permits a user, who is not limited from performing operation via the network by the first management information, to operate the camera apparatus and receive a current image acquired by the camera apparatus if the second management information indicates that the camera apparatus is not being operated by another user,

and said manager prohibits the user to operate the camera apparatus, and permits the user to have access to the camera apparatus for receiving a current image acquired by the camera apparatus if the second management information indicates that the camera apparatus is operated via the network by another user.

2. (Original) The system according to claim 1, wherein one of a first mode in which all operations of said camera apparatus is permitted, a second mode in which all the operations are inhibited, and a third mode in which the operations are permitted within a predetermined range can be set by the first management information for each user.

2/13

971234 v1

PATENT
US/N. 09/894,233

Docket No. 1232-4242US3

3. (Original) The system according to claim 2, wherein a plurality of different operation ranges can be set in the third mode.

4. (Previously Presented) The system according to claim 1, further comprising:

a controller, arranged to control an action of said camera apparatus and instructing said manager to enter or delete registration of said camera apparatus in or from the first management information; and

an operation limiter arranged to instruct said manager to update the limitation information of a camera apparatus to be controlled by said controller.

5. (Previously Presented) The system according to claim 4, further comprising an operating section arranged to request said controller to permit an operation of said camera apparatus via said network in accordance with designation from a user and management by said manager.

6. (Previously Presented) The system according to claim 5, wherein said operating section can obtain registration information indicating a registration state of a camera apparatus contained in the first management information via said network.

7. (Previously Presented) The system according to claim 6, wherein said operating section can instruct said manager via said network to change an access right of a user to a camera apparatus registered in the registration information.

8. (Previously Presented) A control method for a camera apparatus capable of being operated via a network, comprising the steps of:

3/13

971234 v1

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

setting first limitation information for limiting operation via the network of the camera apparatus for each user where the operation is at least one of panning, tilting and zooming of the camera apparatus;

setting second limitation information for indicating whether or not the camera apparatus is operated by a user; and

managing the operation by a user who receives a current image acquired by the camera apparatus on the basis of the set first and second limitation information,

wherein in the managing step, one of the user, who is not limited from performing operation via the network by the first limitation information, can obtain permission to operate the camera apparatus and receive a current image acquired by the camera apparatus if the second limitation information indicates that the camera apparatus is not being operated by another user,

and in the managing step, the one of the user can not obtain permission to operate the camera apparatus and can obtain permission to have access to the camera apparatus for receiving a current image acquired by the camera apparatus if the second management information indicates that the camera apparatus is operated via the network by another user.

9. (Original) The method according to claim 8, further comprising the steps of: requesting remote operation of the camera apparatus via the network in accordance with a designation from the user and the management information; and

controlling an action of the camera apparatus on the basis of the requested remote operation and the set first limitation information.

10. (Original) The method according to claim 9, further comprising the steps of:

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

acquiring the first limitation information for the camera apparatus via the network;
and changing the first limitation information of the camera apparatus via the network.

11. (Currently Amended) The ~~system~~ method according to claim ~~[[1]]~~ 8,
further comprising the steps of:

~~a controller, arranged to control~~ controlling an action of the camera apparatus and

instructing ~~said manager~~ the managing step to enter or delete registration of ~~said~~
the camera apparatus in or from the first management information; and

~~an operating section, arranged to request said controller~~ requesting the controlling
step to permit remote operation of the camera apparatus via the network in accordance with a
designation from a user and the management information.

12. (Currently Amended) The ~~system~~ method according to claim 11, ~~wherein~~
~~said operating section is also for~~ further comprising the steps of:

obtaining registration information indicating a registration state of a camera
apparatus contained in the management information via the network~~[[,]]~~; and

~~[[for]]~~ instructing ~~said manager~~ the managing step via the network to change the
first management information of the registered camera apparatus to change the limitation
information.

13. (Original) The method according to claim 8, wherein when a plurality of
camera apparatuses are connected to a terminal connected to the network, the plurality of camera
apparatuses can be grouped and the first limitation information can be set in units of groups.

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

14. (Original) The method according to claim 8, wherein the first limitation information is set for each user of a terminal connected to the network.

15. (Original) The method according to claim 14, wherein the users can be grouped and the first limitation information can be set in units of groups.

16. (Original) The method according to claim 15, wherein a plurality of access modes having different first limitation information can be set and one of the plurality of access modes can be selected for the user group.

17. (Previously Presented) The system according to claim 1, wherein the first management information contains providing information which indicates permission/prohibition for receiving an image provided by the camera apparatus for each user, and said manager manages sending an image provided by the camera apparatus to the user based on the providing information.

18. (Previously Presented) The system according to claim 1, wherein the first management information contains providing information which indicates permission/prohibition for receiving sound provided by a microphone equipped for the camera apparatus for each user, and said manager manages sending sound provided by the microphone to the user based on the providing information.

19. (Previously Presented) A control system controlling a camera apparatus which is operated via a network where the operation is at least one of panning, tilting and zooming of the camera apparatus, comprising:

an output section, arranged to output a current image acquired by the camera apparatus to at least one user via the network;

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

a manager arranged to manage first and second management information stored in a table where the first management information defines limits of the operation for each user and the second management information indicates whether or not the camera apparatus is operated by a user; and

a controller, arranged to control an action of the camera apparatus within the limits of the operation via the network corresponding to the user who receives the current image and requires the operation,

wherein said controller permits a user, who is not limited from performing operation by the first management information, to operate the camera apparatus and receive the current image if the second management information indicates that the camera apparatus is not being operated by another user,

and said controller prohibits the user to operate the camera apparatus, and permits the user to have access to the camera apparatus for receiving the current image if the second management information indicates that the camera apparatus is operated via the network by another user.

20. (Previously Presented) A control apparatus controlling a camera comprising:

a controller, arranged to control an action of a connected camera based on a received signal which requires operation of the connected camera through a network where the operation is at least one of panning, tilting and zooming, and

a manager, arranged to manage the action of the connected camera based on first and second management information stored in a table where the first management information

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

indicates limitation of the operation for each user and the second management information

indicates whether or not the camera apparatus is operated by a user,

wherein said manager permits a user, who is not limited from performing operation via the network by the first management information, to operate the camera apparatus and receive a current image acquired by the camera apparatus if the second management information indicates that the camera apparatus is not being operated by another user,

and said manager prohibits the user to operate the camera apparatus, and permits the user to have access to the camera apparatus for receiving a current image acquired by the camera apparatus if the second management information indicates that the camera apparatus is operated via the network by another user.

21. (Previously Presented) A control apparatus controlling a camera comprising:

a controller, arranged to control an action of a connected camera based on a received signal which requires operation of the connected camera through a network, the operation being at least one of panning, tilting and zooming,

an output section, arranged to output a current image acquired by the connected camera to at least one user via the network;

a manager, arranged to manage first and second management information stored in a table where the first management information defines limits of the operation for each user and the second management information indicates whether or not the connected camera is operated by a user; and

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

a controller, arranged to control an action of the connected camera within the limits of the operation via the network corresponding to the user who receives the current image and requires the operation,

wherein said controller permits a user, who is not limited from performing operation by the first management information, to operate the connected camera and receive the current image if the second management information indicates that the connected camera is not being operated by another user,

and said controller prohibits the user to operate the camera, and permits the user to have access to the camera for receiving the current image if the second management information indicates that the camera is operated via the network by another user.

22. (Original) A control method for a camera apparatus which is operated via a network where the operation is at least one of panning, tilting and zooming of the camera apparatus, comprising the step of:

outputting a current image acquired by the camera apparatus to at least one user via the network;

managing first and second management information stored in a table where the first management information defines limits of the operation for each user and the second management information indicates whether or not the camera apparatus is operated by a user; and

controlling an action of the camera apparatus within the limits of the operation via the network corresponding to the user who receives the current image and requires the operation,

wherein in the controlling step, a user, who is not limited from performing operation by the first management information, is permitted to operate the camera apparatus and receive the current image if the second management information indicates that the camera

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

apparatus is not being operated by another user, and the user is prohibited to operate the camera apparatus, and is permitted to have access to the camera apparatus for receiving the current image if the second management information indicates that the camera apparatus is operated via the network by another user.

23. (Previously Presented) A control apparatus for controlling a camera connected to said apparatus, comprising:

a controller, arranged to control an action of the camera based on a received signal which requires an operation of the camera; and

a memory, arranged to store first management information which indicates limitation of operation of the camera for each user and second information which indicates whether the camera is operated by a user or not,

wherein said controller permits a user, who is not limited from performing operation via a network by the first management information, to operate the camera and receive a current image acquired by the camera if the second management information indicates that the camera is not being operated by another user, and

said controller prohibits the user to operate the camera, and permits the user to have access to the camera for receiving a current image acquired by the camera if the second management information indicates that the camera is operated via the network by another user.

24. (Previously Presented) The apparatus according to claim 23, wherein the operation of the camera includes at least one of panning, tilting or zooming operation of the camera.

25. (Previously Presented) The apparatus according to claim 23, wherein the first management information includes a range of the operation of the camera for each user.

10/ 13

971234 v1

PATENT
USS/N. 09/894,233

Docket No. 1232-4242US3

26. (Previously Presented) The apparatus according to claim 23, wherein the first management information can be set in a unit of groups including plural users.

27. (Previously Presented) A control method of controlling a camera based on first management information which indicates limitation of operation of the camera for each user and second information which indicates whether the camera is operated by a user or not, comprising the steps of:

permitting a user, who is not limited from performing operation via a network by the first management information, to operate the camera and receive a current image acquired by the camera if the second management information indicates that the camera is not being operated by another user; and

prohibiting the user to operate the camera, and permitting the user to have access to the camera for receiving a current image acquired by the camera if the second management information indicates that the camera is operated via the network by another user.

28. (Previously Presented) The method according to claim 27, wherein the operation of the camera includes at least one of panning, tilting or zooming operation of the camera.

29. (Previously Presented) The method according to claim 27, wherein the first management information includes a range of the operation of the camera for each user.

30. (Previously Presented) The method according to claim 27, wherein the first management information can be set in a unit of groups including plural users.

31. (Previously Presented) A computer program product comprising a computer readable medium storing a computer program code, for a control method of controlling a camera based on first management information which indicates limitation of operation of the

11/13

971234 v1

PATENT
USN. 09/894,233

Docket No. 1232-4242US3

camera for each user and second information which indicates whether the camera is operated by a user or not, comprising process procedure code for:

permitting a user, who is not limited from performing operation via a network by the first management information, to operate the camera and receive a current image acquired by the camera if the second management information indicates that the camera is not being operated by another user; and

prohibiting the user to operate the camera, and permitting the user to have access to the camera for receiving a current image acquired by the camera if the second management information indicates that the camera is operated via the network by another user.

32. (Previously Presented) The product according to claim 31, wherein the operation of the camera includes at least one of panning, tilting or zooming operation of the camera.

33. (Previously Presented) The procedure according to claim 31, wherein the first management information includes a range of the operation of the camera for each user.

34. (Previously Presented) The procedure according to claim 31, wherein the first management information can be set in a unit of groups including plural users.

35 – 46 (Canceled)